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EXAMINER

CHAPMAN, GINGER T

ART UNIT PAPER NUMBER

3761

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/618,755

Applicant(s)

JOHNSTON ET AL.

Examiner

Ginger T Chapman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claim 33 is objected to because of the following informalities: The preamble of claim 33 recites the method of claim 1; independent claim 1 is drawn to an article, independent claim 30 is drawn to a method. Examiner considers method claim 33 as depending from independent method claim 30. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14, 16-28, 30-32, 34-46, 48-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Chmielewski (WO 99/49826).

**Claims 1 and 30:** As seen in Figures 1 and 3, Chmielewski discloses an absorbent article (10) comprising: a topsheet (30); a backsheet (32); an absorbent core (342) disposed between the topsheet and the backsheet; wherein the absorbent article has a thermal resistance (clo) of less than about 1.7 watts/m.sup.2, as measured in a Thermolabo apparatus.

**Claim 2:** whereby the topsheet (30) and the backsheet (32) form a first waist region (22), a second waist region (24) longitudinally opposite the first waist region, and a crotch region (26) there between, and the absorbent article further comprises at least one fastening element (40) attached to a lateral edge of the first waist region; and one or more target devices attached to the

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article in the second waist region, where at least one fastening element and the one or more target devices are capable of attaching to one another, the one or more target devices being located so that the first waist region and second waist region of the garment may be joined to one another to secure the garment on a wearer (page 20, lines 5-7 and lines 10-11).

**Claim 3:** further comprising elastic leg gathers (36) comprising one or more elastic materials disposed adjacent a lateral edge of the crotch region (page 19, lines 19-20), and standing leg gathers (501, 502) disposed on the topsheet adjacent a lateral edge of the crotch region (page 46, lines 19-21).

**Claim 4:** wherein the at least one fastening element comprises a hook portion of a hook and loop fastener and the one or more target devices comprise the loop portion of a hook and loop fastener (page 20, line 6 (401) and page 15, line 24-25).

**Claim 5:** wherein the at least one fastening element is an adhesive tape (page 15, line 24) and the one or more target devices comprise a tape receiving surface.

**Claim 6:** wherein the at least one fastening element is comprised of a pair of laterally extending tabs (page 20, line 6) disposed on the lateral edges of the first waist region, whereby the laterally extending tabs each include at least one fastening element.

**Claim 7:** further comprising a fluid acquisition layer (fig. 6: (650); page 26, line 5-6) disposed between the topsheet and the backsheet.

Examiner notes that WO99/49826 page 23 lines 4-5 identify figure 6 (650) as a low density acquisition layer while page 23, line 14 identifies fig. 6 (650) as an optional transfer layer comprising layers 652 and 654. Examiner is interpreting (650) as an acquisition layer in light of

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p. 23 of WO99/49826, layer 652 as the absorbent layer in light of p. 26 line 9 and layer 654 as the wicking layer in light of p. 23 lines 14-18 and p. 26 lines 8-12.

**Claim 8:** further comprising a distribution layer (page 11, lines 29-31 to p. 12, lines 1-2 and p. 25, lines 21-31: fig. 5b (342e)) disposed between the topsheet and the backsheet.

**Claim 9:** further comprising a wicking layer (654) disposed between the topsheet and the backsheet. See claim 7, *supra*.

**Claim 10:** further comprising a storage layer (p. 11, lines 21-22; p. 20, line 24: (342a)) disposed between the topsheet and the backsheet.

**Claim 11:** further comprising a fragmented layer (page 23, lines 20-23) disposed between the topsheet and the backsheet. Examiner has interpreted “fragmented layer” in light of applicant specification: page 34 lines 19-22 describes fragment layer as fragments of other layers and p. 42 line 7 suggests fragmenting layers using guidelines provided therein. A thorough reading of applicant specification fails to reveal specific guidelines or further teachings of fragmenting the layer. In light of the physical description, examiner has interpreted fragmented layer as a layer having different combinations of materials.

**Claim 12:** further comprising a combination of a wicking layer and a distribution layer (page 28, lines 29-31 to p. 29, lines 1-13; figs. 12a-12c) disposed between the topsheet and the backsheet.

**Claim 12 and 31:** wherein the absorbent core comprises: an upper layer (fig. 2: 342b); a lower layer (342c); and a central fibrous layer (342a) disposed between the upper layer and the lower layer, the central fibrous layer comprising a mixture of at least a fibrous material and superabsorbent polymer (SAP) (page 22, lines 13-16).

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**Claim 14 and 32:** wherein the absorbent core has a density within the range of from about 0.05 to about 0.45 g/cm<sup>3</sup> (page 6, lines 2-3).

**Claim 16 and 34:** wherein the SAP is selected from the group consisting of a water swellable polymer of water soluble acrylic or vinyl monomers crosslinked with a polyfunctional reactant, a starch modified polyacrylic acid, a hydrolyzed polyacrylonitrile, alkali metal salts of hydrolyzed polyacrylonitrile, and mixtures thereof (page 1, lines 21-27).

**Claim 17 and 35:** wherein the SAP is a starch grafted polyacrylate sodium salt (page 1, lines 26-28).

**Claim 18 and 36:** wherein the fibrous material is selected from the group consisting of a crimped tow of cellulose acetate or polyester, a low-density roll good, a carded web, and mixtures or combinations thereof (page 35, lines 16-20).

**Claim 19 and 37:** wherein the absorbent core further comprises from about 1-5% of a thermally bondable fiber (page 29, lines 27-28).

**Claim 20 and 38:** wherein the fibrous material is a crimped tow of cellulose acetate (page 35, line 17).

**Claim 21 and 39:** the central fibrous layer comprises from about 50% to about 95% by weight super absorbent polymer (SAP), and has a SAP efficiency of at least 80% (page 9, lines 4-10).

**Claim 22 and 40:** wherein the central fibrous layer further comprises particulate additives (page 13, line 25).

**Claim 23 and 41:** wherein the particulate additives comprise insoluble, hydrophilic polymers having particle diameters of 100 .mu.m or less (page 14, line 3).

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**Claim 24 and 42:** wherein the particulate additives are selected from the group consisting of potato, corn, wheat, and rice starches, and partially cooked or modified starches (page 14, lines 8-9).

**Claims 29 and 47:** wherein the absorbent core has a thickness within the range of from about 5 to about 20 mm (fig. 7b).

**Claim 48:** folding the absorbent core prior to disposing the core between the topsheet and the backsheet (page 10, lines 11-14).

**Claim 49:** wherein the absorbent core is folded into a "C" configuration (figs. 1-3, page 24, line 18).

### ***Claim Rejections - 35 USC § 102/103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 25-28 and 43-46 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chmielewski (WO 99/49826).

When viewing the claimed invention the limitations drawn to test results, i.e., "has an intrinsic thermal resistance (Rcf) of less than about 0.25.degree. C. m<sup>2</sup>/Watts, as measured on a 20 x 20 inch sample in a Thermolabo apparatus", are being considered as product-by-process limitations. Accordingly § 2113 of the MPEP, some of which is reproduced below, dictates the manner in which the claims have been examined. Since the product can only be understood by finding the result of certain claimed characteristics, which are the result of tests, the burden of proof to overcome any rejection must be shifted to the applicant.

"The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983)

Chmielewski (WO 99/49826) discloses the absorbent article substantially as claimed. Chmielewski also discloses the same materials applicant has indicated are used in the article and as the absorbent core and therefore it would be inherent that the article would provide the thermal resistance properties. In as much, the teachings of Chmielewski provide all that is claimed in the instant application. In the alternative it would have been obvious to have

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provided the material that meets the required test characteristics since applicant has not provided any most favorable product for use to provide thermal resistance or provided any proof that one of the many possible products is required to make the invention operable.

"[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972).

Claims 15 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chmielewski (WO 99/49826) as applied to claims 1 and 30 above, in view of Jackson (US 5,350,37).

**Claims 15 and 33:** Chmielewski discloses an absorbent article comprising a topsheet, a backsheet and an absorbent core disposed between the topsheet and the backsheet.

Chmielewski fails to disclose the absorbent core having a basis weight within the range of from about 650 to about 1350 gsm. Jackson at column 7, lines 36-38, teaches that it is known to tailor the basis weight of an absorbent core to a specific end use typically in the range of 100-1000

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grams per square meter. In particular, Jackson teaches a composite having a basis weight from 100-1000 gsm (col. 2, lines 63-64). It is well known in the diaper art to vary the basis weights, thickness and density of cores in order to accommodate the size of the intended wearer and the volume of liquid loading imparted by the intended use of the article. In view of this known teaching, to form the absorbent core of Chmielewski having the basis weights as taught by Jackson would have been obvious to one of ordinary skill in the art at the time the invention was made in order to provide a variety of absorbent capacities for the varying needs of the wearer since the provision of size adjustability involves only routine skill in the art.

Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chmielewski (WO 99/49826) as applied to claim 1 above, and further in view of U.S. Patent No. 6,238,379 issued to Kuehn, Jr et al.

With regard to claim 4, Chmielewski ('826) teaches a fastening system (40) utilizing tape or other suitable mechanical fasteners. Chmielewski is silent as to employing hook and loop fasteners to secure the article about the waist of the wearer. It is well known in the diaper art that mechanical type fasteners include, inter alia, hooks and loops, tapes, adhesives, cohesives, safety pins, buttons and snaps. Kuehn et al disclose the use of mechanical fastening means. In particular, Kuehn teaches that it is generally known in the art to employ hook and loop fasteners to secure a diaper on the wearer (col. 9, lines 46-50) because hook and loop type fasteners are capable of being released and reattached. Therefore, to have utilized the hook and loop type mechanical fastener as taught by Kuehn in the Chmielewski mechanical fastening system to produce a diaper that can be adjusted or checked for soiling without compromising the ability to

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reuse the fastener would have been obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response to Arguments***

Applicant's arguments, see Page 9, III (C) remarks, filed 2 February 2005, with respect to the rejections of claims 1-3, 5-14, 16-21, 23-32 and 34-49 under 35 USC 102 (b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Chmielewski (WO 99/49826).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Litchholt et al (US 5,895,379). As best depicted in Figure 2, Litchholt teaches an absorbent core (18) having layers 41, 42, 34, 36, 35, 37 and 38 (col. 26, lines 50-64).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T Chapman whose telephone number is (571) 272-4934. The examiner can normally be reached on Monday through Friday 8:30 a.m. to 5:00 p.m..

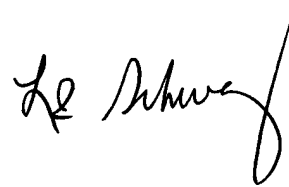
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on (571) 272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ginger Chapman  
Examiner, Art Unit 3761

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Larry I. Schwartz  
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